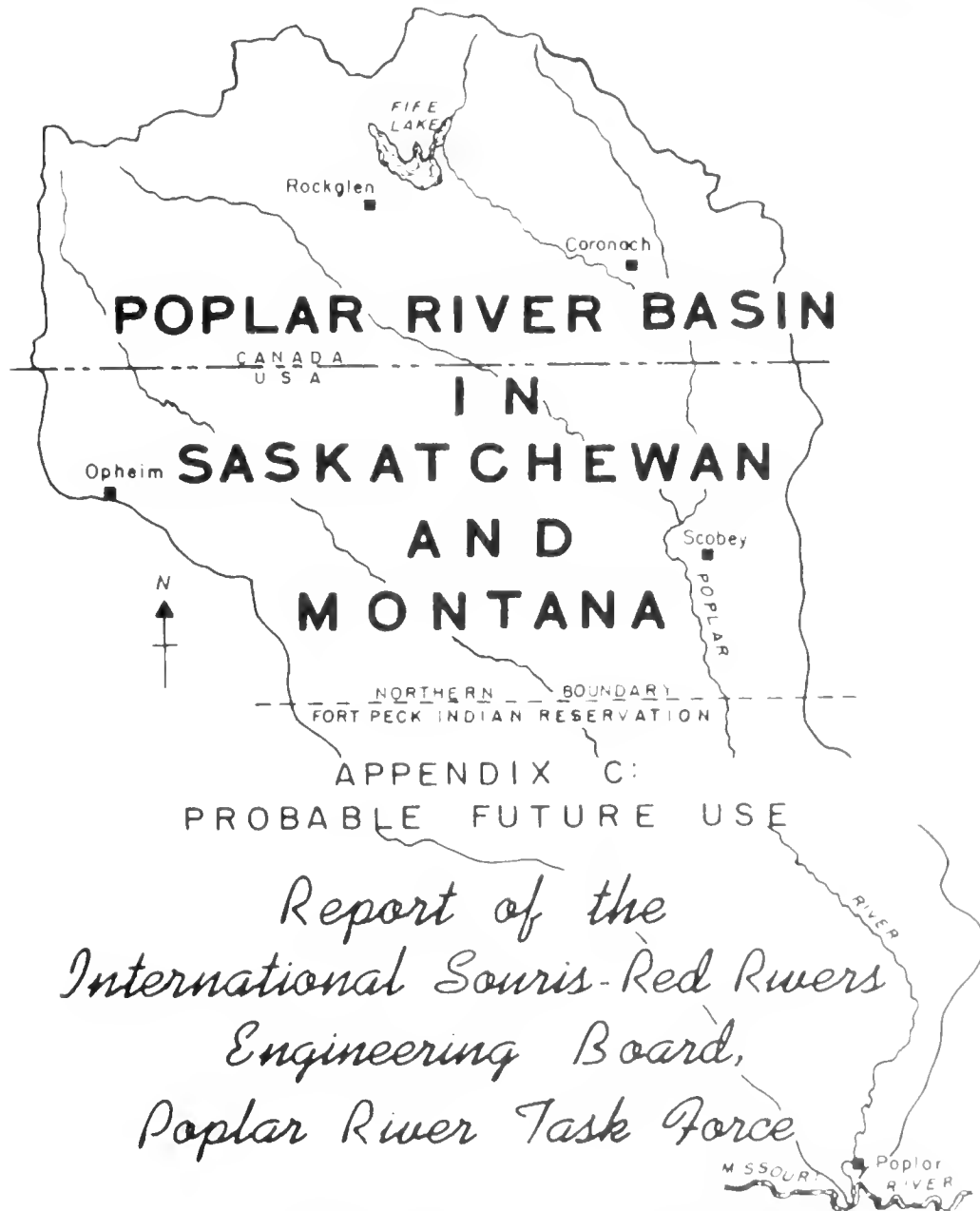


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# Joint Studies for Flow Apportionment



Report of the  
International Souris-Red Rivers  
Engineering Board,  
Poplar River Task Force

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POPLAR RIVER BASIN

MONTANA - SASKATCHEWAN

APPENDIX C:

PROBABLE FUTURE WATER USE

REPORT OF THE INTERNATIONAL SOURIS-FED RIVERS

ENGINEERING BOARD,

POPLAR RIVER TASK FORCE

FEBRUARY, 1976



## APPENDIX C

### SYNOPSIS

At the request of the Poplar River Council, the Saskatchewan Department of the Environment and the Montana Department of Natural Resources and Conservation have carried out studies of future water use in their respective portions of the Poplar River Basin.

The studies were directed toward determining two levels of demand, that expected to occur by year 1985, and that which could possibly occur based upon known resources capabilities. Identified uses that are expected to develop by the year 1985 were 9,100 acre-feet in Saskatchewan and 22,400 acre-feet in Montana. Additional possible future uses identified were 66,500 acre-feet in Saskatchewan and 2,400 acre-feet in Montana. The expected development and possible future uses must depend on imports from other basins since the total exceeds the basin's average annual water supply.

Since the study was based upon known resource capabilities and existing information, the results are probably not compatible in the two jurisdictions because of data availability. The results must therefore be used with some discretion.

## APPENDIX C

### ACKNOWLEDGEMENTS

The assistance of a number of agencies mentioned in the text of this report who contributed information to this study is gratefully acknowledged. Aid and assistance of the Fort Peck Sioux and Assiniboiné Tribes, the U.S. Bureau of Indian Affairs and the consulting firm of Morrison-Maierle, Inc., is acknowledged and appreciated.

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Figure

C-1: Key Map of Top-n

Figure C-1



The Poplar River Basin Study was conducted by the Saskatchewan Department of the Environment and the Montana Department of Natural Resources and Conservation. The Task Force was to prepare a report on the study.

1. An equitable apportionment of the flows of the Poplar River basin.
2. A method of calculation of natural flows in the Poplar River Basin at the international boundary.
3. The membership, and terms of reference, of an international group to administer an apportionment agreement.

The terms of reference for the Task Force include a sector study to determine future water uses in the basin in both Canada and United States.

The objective of the probable future use sector study is to catalogue the future uses of water in the Poplar River Basin that could be developed by the year 1985 and to list other identified future uses that could develop beyond the year 1985. Types of uses considered in the study include domestic, irrigation, municipal, industrial, recreation and wildlife conservation.

The Task Force designated the Saskatchewan Department of the Environment and the Montana Department of Natural Resources and Conservation as lead agencies for this component study. Liaison between the two agencies was maintained in an attempt to assure that similar methods were used in estimating future uses.

Actual development of the probable future uses will be dependent on a number of limiting factors such as economics, environmental impact, water variability and jurisdictional constraints such as apportionment agreements, water rights and, in the United States, the Federal Reserved water rights. (See Chapter V of Appendix A for detailed discussion of Federal Reserved Rights).

The study approaches are outlined in Chapter III of this report and the results of the study are given in Chapter III. The results are summarized in Chapter IV.

## II. APPROACH

The study was directed toward determining two levels of probable future demands:

1. Firm intents to use water by year 1985.
2. Possible future uses of water based on known resource capabilities.

Despite liaison during the course of the study, the approach to the study differed somewhat in the two countries.

### Saskatchewan

Estimates of future water use for private development of domestic and irrigation projects were made based on a graphical projection of historical water use. It was assumed that private development in the future would proceed at the same rate as it has in the past.

Information on other types of future developments was obtained by canvassing 11 development and resource agencies in the province to solicit views on future uses of water that these agencies may be involved with or are aware of which could represent a demand on the resources of the Poplar River basin in Saskatchewan. The agencies contacted were:

1. Saskatchewan Department of Agriculture
2. Executive Council, Province of Saskatchewan
3. Saskatchewan Department of Industry and Commerce
4. Saskatchewan Department of Mineral Resources
5. Saskatchewan Department of Tourism and Renewable Resources
6. Saskatchewan Department of Municipal Affairs
7. Energy Secretariat, Province of Saskatchewan
8. Saskatchewan Power Corporation
9. Canadian Wildlife Service
10. Prairie Farm Rehabilitation Administration
11. Ducks Unlimited (Canada)

Estimates of water use were categorized as firm intents to be realized by 1985 and possible future uses based upon known resource capabilities. Mineral exploration or extensive surveys to determine land capability was considered beyond the scope of this study.

### Montana

Approximately one half of the Poplar River basin in Montana is in the Fort Peck Indian Reservation. The approach used for determining potential water use for the area outside the Reservation varied somewhat from that used within the Reservation.

Outside the Poplar River, Poplar, Tongue River, and their streams were mapped and landowners were contacted to obtain information on future plans, acreages involved in the future development. Where state land was involved, the lessee and the appropriate state lands were contacted.

Other information on irrigation potential was obtained from long range planning studies made by the Montana Department of Natural Resources and Conservation. These include a reconnaissance land classification specifically designed to establish the degree of suitability of land for sustained irrigation farming. This land classification is based on long range projection using Soil Conservation Service soil survey maps, Bureau of Reclamation land classification studies and minimal field observations. In the Poplar River Basin there was a paucity of available data and thus the survey was very general.

Other future uses of water outside the Reservation were estimated from information obtained by the Montana Department of Natural Resources and Conservation through its normal activities related to water resource development and administration.

#### Within Fort Peck Indian Reservation

Within the Fort Peck Indian Reservation, information on future water uses in the Poplar River basin was obtained from the results of an ongoing series of investigations directed toward providing a broad framework for development of Indian water supplies. The study is being carried out by the consulting firm of Morrison-Maierle, Inc., under contract with the U.S. Bureau of Indian Affairs. The Fort Peck Tribes are providing guidance and direction in the conduct of the studies.

The Poplar River Basin is being studied to determine the type and level of water resource development the Tribes could undertake to realize the benefit of their Federal Reserved rights. Firm water supply has been estimated based on storage potential and streamflow characteristics. Acreage of lands suitable for irrigation from the Poplar River were determined by utilization of several sources of information including field examination, Soil Conservation Service soils mapping, 1952 Bureau of Reclamation test borings, and Department of Natural Resources and Conservation reconnaissance land classification. Criteria used to evaluate irrigation suitability reflect modern irrigation principles and practices. Conclusions regarding suitability of land for irrigation are considered reasonable based on reconnaissance level investigations.

Information on lignite coal resources in the Reclamation was reported by the consultant based largely on information obtained from open-file reports of the Montana State Bureau of Mines and Geology and from data developed by Great Northern Railway.

### III. RESULTS

The results of the study are summarized below for each jurisdiction.

It must be recognized that the study is based only upon known resource capabilities, and that additional water demands may result from currently unknown resource potentials in the basin. It must also be recognized that the results do not necessarily reflect the same level of investigation in each jurisdiction.

#### Saskatchewan

##### Domestic Water Requirements

There has been a steady increase in domestic water use in the Saskatchewan portion of the basin since the 1930's. Domestic use includes water needed for livestock, household, garden irrigation and stock pond evaporation. Based on a linear projection of historical use, it is estimated that domestic water use will be about 730 acre-feet, an increase of about 130 acre-feet by year 1985.

##### Irrigation Water Requirements

Historical water use for private irrigation projects has been somewhat sporadic, however, there has been a general increase since the mid-1950's. Based on a linear projection of historical use, it is estimated that private irrigation water use will be about 380 acre-feet, an increase of about 120 acre-feet by year 1985.

There are no firm plans for large scale irrigation development in Saskatchewan. However, irrigation potential has been investigated in several areas of the basin. A brief description of areas investigated follows:

1. West Poplar Project - The potential exists for about 600 acres of irrigation on the valley flats. The existing West Poplar Reservoir could provide a firm water supply for 100 to 150 acres of the irrigable land. Additional storage and probably a supplemental source of water would be required to realize the full potential of the area.
2. Rockglen Grazing Co-op Irrigation Project - Approximately 400 acres were investigated for irrigation potential during the early 1950's. Development was not considered feasible at that time because of soil suitability.

3. Coronach Area - The area has excellent irrigation potential. Land in the area is suitable for irrigation.
4. Killdeer Area - The area has excellent potential for about 100,000 acre-feet of water. The area of the West River is being developed.

The present water use in the area is for development other than small private projects with the exception of a group project using water for irrigation. The potential water use of this project is about 100,000 acre-feet.

### Municipal Water Requirement

The major centers within the region are Coronach with populations of 524 and 300 respectively. All other communities have populations of less than 100 and, with limited natural growth potential, are not likely to have a significant increase in water demand other than that associated with development of non-related industry.

The Town of Rockglen is considered to have long term stability. Historic population increases are expected to continue. The town currently uses ground water for its water supply and has excellent prospects for continuing supply from the same source.

The Village of Coronach has excellent growth potential because of proposed development of the nearby coal resources. Current water use in the village is about 40 acre-feet per year. The source of this water is a well situated in a sand and gravel aquifer adjacent to the Coronach Reservoir. Based on drawdown computations, it is estimated that about 90 percent of the use represents a depletion to surface water due to recharge of the well from the adjacent reservoir. From population projections for the Village of Coronach, it is estimated that water use will be about 150 acre-feet per year by the year 1985 - an increase of about 110 acre-feet over current use. For the purposes of this study it is assumed that this increase will be provided from surface water.

By the year 2000 it is estimated that water demand will increase by about 600 acre-feet over present use, primarily due to population increases associated with development of the coal resources in the area. This would be an increase of about 500 acre-feet per year over the 1985 level of municipal use.

Other municipal demands could develop if the proposed National Park becomes established west of Killdeer. A major development associated with the park would be developed in the vicinity of Killdeer and would provide accommodations, camping and tourist facilities. It is possible that this development could occur before 1985, however, water requirements have not been estimated.

## Industrial Water Requirements

Undoubtably, the most important non-agricultural resource in the basin is lignite coal. There are six minor and six major economically recoverable coal fields in the Saskatchewan portion of the basin which can be categorized as follows:

<u>Number of Coal Fields</u>	<u>Reserve Size Millions of Tons</u>
1	500 - 600
4	200 - 350
1	100 - 200
6	less than 50.

In these categories, seam thicknesses of five feet or greater are included to a depth of 150 feet. Three or four foot seams are included if the stripping ratio is ten to one or better.

The Saskatchewan Power Corporation has firm plans for development of a lignite coal fired thermal power project in the East Poplar River Basin south of Coronach. The project involves an earthfill dam located in SW 16 and SE 17-1-26-2, about two miles north of the international boundary. The dam will have a concrete spillway with a fixed crest at elevation 2470.0. A 48-inch diameter riparian outlet with a slide gate control with sill elevation 2434.7 is proposed. The gate will have a ten-inch hypass pipe with a valve control at elevation 2436.3. The riparian outlet will be capable of a discharge of about 190 cfs at the full supply level (2470.0).

The reservoir will extend up the East Poplar River a distance of about seven miles from the dam and up Girard Creek a distance of about two miles from the confluence. The storage capacities and flooded areas at key reservoir elevations are as follows:

	<u>Storage (acre-feet)</u>	<u>Flooded Area (acres)</u>
Full Supply Level 2470.0	32,000	1780
Minimum Operating Level 2445.0	5,300	580
Riparian Outlet Level 2434.7	900	260

The reservoir will be used as a source of water and as a cooling pond for the power plant. Cooling water will be pumped from the reservoir, circulated through the plant and returned by canals adjacent to the reservoir. The canals would empty into the reservoir at points where sufficient reservoir area would be developed to provide adequate cooling.

Supplementary sources of cooling water will be required for full development of the project. A study is currently under way to evaluate various alternatives which include development of local sources, importing water from nearby basins and importing water from Lake Diefenbaker.



A generalized development schedule for the East Poplar River site and requirements associated with the project up to year 1985 are shown in Table C-1.

<u>Year</u>	<u>Installed Capacity</u>	<u>Additional Water Requirement</u>
1979	1 - 300 MW <sup>*</sup> unit	4,000 acre-ft.
1982	2 - 300 MW units	6,000 acre-ft.
1984	3 - 300 MW units	8,000 acre-ft.

Note that the water requirements for the first unit are made up of 1,000 acre-feet for natural evaporation from the water supply reservoir, 1,000 acre-feet of forced evaporation and a consumptive use of 140 acre-feet for plant operation. Each additional unit will require water to meet only the forced evaporation and consumptive use needs.

A fourth 300 MW unit at the East Poplar River site can be commissioned in 1986. This unit would require an additional 1,900 acre-feet.

No other firm plans or intents have been identified by government or private industry related to the development of coal reserves in the area and, given the extensive lead times associated with the planning, design and construction of various coal using facilities, it would appear doubtful that any other large scale project would be commissioned by year 1985.

Beyond the year 1985, other developments related to the coal resources are anticipated in addition to the fourth unit at the East Poplar thermal power project. While the mining of coal does not require significant amounts of water, various processes used to upgrade the resource require substantial water use.

In an ongoing long-range planning study for the development of the coal resources of the area, various uses for the individual coal fields have been selected based upon economically recoverable reserve size, coal requirements during the life of the project and foreseeable needs for coal products. Uses considered are electrical power generation, coal gasification, coal liquefaction, and ammonia or urea production. The foreseeable developments and water requirements beyond the year 1985 are summarized in Table C-1.

It is noteworthy that the water requirements per ton of coal are relatively similar for the alternate end-uses and the total water requirement per annum are directly dependent upon the sequence and scheduling of development. At the extreme, if all projects were to be in operation at the same time, the total annual water requirements in or adjacent to the basin would be over 100,000 acre-feet. More realistically, water use by the year 2000 for the development of the coal resources has been estimated to be about 24,000 acre-feet per year. This figure has been used for the purposes of this study. This would represent an increase of about 66,000 acre-feet over the 1985 level of use.

\* MW = 1,000,000 Watts

Table C-1: Foreseeable Post-1985 Development of Coal Resources in Poplar River Basin in Saskatchewan.

<u>Possible End Use</u>	<u>Coal Requirements over Life of Project (Millions of Tons)</u>	<u>Water Requirements (Ac.Ft./Year)</u>
1 - 300 MW <sup>*</sup> addition to East Poplar development	50	1,900
1 - 1,200 MW thermal power plant	200	10,000
1 - 1,500 MW thermal power plant	250	12,000
1 - 900 MW thermal power plant	150	7,000
2 - 250 MMCFD <sup>*</sup> coal gasification plants	800	32,000
2 - 12,500 TPD <sup>*</sup> ammonia or urea plants	500	25,000
1 - 7,500 TPD ammonia plant	150	7,500
<sup>*</sup> Abbreviations: MW - Megawatt = 1,000,000 Watts. MMCFD = 1,000,000 cubic feet per day. TPD = Tons per day.		

There are other mineral deposits in the basin that could be economically developed at some time in the future. These include extensive deposits of quartzite that could be used as a source of high grade silica for cement, ceramics, or for use in the metallurgical industry; large deposits of volcanic ash and non-swelling bentonite near Rockglen; workable deposits of stoneware and brick clays near Rockglen and Strathallen; and a deposit of marl near Strathallen. It is doubtful that any of these deposits will be developed before 1985. It is felt that, although larger deposits of these minerals may exist closer to large communities outside the Poplar River Basin, the deposits within the basin may be preferred for development because of their close proximity to coal fields and future electrical power sources. No water requirements for the development of these minerals have been estimated.

## Wildlife Water Requirements

of 1 potential wildlife area located in the basin by Ducks Unlimited (Canada). The location of the individual areas are as follows:

NW 35-3-27-3	40 acre-feet
NF 32-2-29-3	80
SW 13-3-29-3	400
SW-9-1-30-3	20
N 33-2-29-3	30
W 9-1-28-3	20
Sec. 19-1-25-3	70
Sec. 10, 11-1-26-3	200
TOTAL	1,220 acre-feet

It is the intention of Ducks Unlimited (Canada) to develop some of these projects in the near future and to develop the remainder prior to 1985. Assuming that about 25 percent of these projects would be feasible, estimated total annual water use would be 300 acre-feet.

## Recreation Water Requirements

The only water based recreational development in the basin is the well established Regional Park on Fite Lake. There will undoubtedly be recreational demand on the proposed East Poplar Reservoir, particularly in view of the anticipated population growth in the area. Maintaining acceptable recreational levels on the Fite Lake and the reservoir could represent a significant water demand, however, no attempt has been made to quantify this demand.

## Montana

### Domestic Water Requirements

Domestic water use, including water needed for home use, crop irrigation, livestock and stock pond evaporation, has steadily increased in the Montana portion of the basin since the 1930's. A linear projection of this historical trend indicates that an additional 420 acre-feet of domestic water will be required by 1985. Of the 420 acre-feet, 130 acre-feet are projected for Indian use and 290 acre-feet for non-Indian use.

### Irrigation Water Requirements

Information on potential irrigation outside the Indian Reservation is obtained by interviewing owners of irrigable land located near stream flows summarized in Table 2. Water use is estimated assuming a 10-inch use for spreader dike systems and a 30-inch use for sprinkler or gravity systems. This criteria is roughly consistent with the procedure used to estimate

Table C-2: Potential Irrigation Requirements in the Poplar River Basin in Montana Outside the Indian Reservation.

Subbasin	Pre - 1985 Development				Post - 1985 Development	
	Spreader Dike		Gravity-Sprinkler		Acres	Water Use (Ac.Ft.)
	Acres	Water Use (Ac.Ft.)	Acres	Water Use (Ac.Ft.)		
Maternach Coulee			80	200		
Coal Creek	75	62			57	140
Middle Fork Poplar R.			932	2,330	500	1,250
East Poplar River	30	25			75	190
West Fork Poplar R.	100	83	387	970	200	500
Poplar R. (to Indian R.)	42	35	420	1,050	16	40
Butte Creek	20	17				
Police Creek	150	125				
Woodley Creek					300	250*
TOTALS		347		4,550		2,370

\* Spreader Dyke System

historical water use in the Montana portion of the Poplar River Basin. Soil type, crop requirements and a 65 percent field efficiency were assumed that sufficient water would be available for four years in a year between April 1 and July 31.

It is estimated that irrigation requirements within the Indian Reservation will be increased by about 4,900 acre-feet in 1985. In the year 1985, the requirements for an additional 2,400 acre-feet have been identified.

In a more general study carried out by the Department of Natural Resources and Conservation, land areas having a potential for irrigated agriculture were classified. For the Poplar River Basin outside the Indian Reservation, the results were as follows:

Class 1 Lands	None
Class 2 Lands	59,500 acres
Class 3 Lands	234,900 acres

Because of the available information, this survey was very general, however, it is felt that there are large tracts of land that could be irrigated by diverting water from the Poplar River and its main tributaries. If a water supply could be established, further evaluation of the land classification and acreages to be served would be necessary.

Within the Fort Peck Indian Reservation, the ongoing study by the consulting firm, Morrison-Maierle, Inc., has indicated that a substantial increase in irrigation of reservation land is needed to meet Tribal objectives. Development of irrigated land is considered an important factor for creating employment and raising income levels on the reservation. As an initial step in development of their Federal Reserved rights, the tribes have initiated investigation of the Poplar River to determine the level of irrigation development that would be compatible with other potential water uses on the reservation lands.

Three potential storage sites have been identified on the Poplar River that could be used to supply water to the irrigable lands near the river. In view of data constraints and initial thoughts regarding the location of storage sites, analyses to date have centered on only one of these sites. The reservoir site is located primarily in Township 30N and Range 51E. It would have a storage capacity of 97,400 acre-feet and a dependable water supply capability of about 60,000 acre-feet per year based on historical streamflow records.

There are two fundamental groups of soils that could be irrigated from reservoir sites on the Poplar River. One group consists of soils that are slow to rapidly self-draining soils that have both internal and surface drainage characteristics suitable for sustained irrigation management whereby irrigation water can be applied in amounts sufficient to satisfy total crop requirements and in the absence of artificial drainage. There is a total of 29,800 acres of land of this type in the eastern portion of the reservation that could be supplied with water from the Poplar River. The other group consists of slowly self-draining soils that would require design of artificial drainage. There is a total of 96,200 acres of land of this type near the Poplar River.

The development of the dependable water supply would require the full level of the historic streamflow as input to the proposed reservoir. Additional upstream depletions would result in a reduction of dependable supply. It was estimated that the historic level of streamflow would support an irrigation project of more than 20,000 acres if irrigation was considered the sole purpose of development. A distribution system for the proposed irrigation project has been located to serve the better lands. Feasibility studies of the project have not yet been completed. However, investigations completed to date have been encouraging. A benefit-cost ratio considering only the agricultural benefits has been estimated to be 1.00. Other benefits such as recreation, flood control and possible coal energy production, have not yet been evaluated.

A detailed construction schedule has not been developed since the feasibility study is not yet complete. However, the Tribes currently favor the Poplar River development and authorization will be anticipated prior to 1980. Construction of the dam and related facilities could be completed in two years in conjunction with 3 to 4 years of land development at the rate of 5,000 acres per year. It is reasonable to assume that water deliveries could be initiated in 1981, with full development of supplies by 1985.

Undoubtably there is potential for further irrigation development in the Poplar River basin within the Reservation if a water supply was available. No attempt has been made to quantify total water requirements for irrigation.

#### Municipal Water Requirements

Scobey is the major population center in Montana's portion of the Poplar River Basin. With a population of nearly 1,500 (1970 census), growth has been negligible for the past 15 years. However, municipal water use over the same period of time has more than doubled.

Recently announced plans for development of a potash mining operation near Scobey could cause significant growth in the municipal demands. Since these plans are so recent, no attempt has been made to assess their impact. Even without this development, it is estimated that municipal water use will increase by 120 acre-feet for Scobey by 1985.

#### Industrial Water Requirements

In December, 1975, Burlington Northern, Inc. and CF Industries, Inc. jointly indicated their intention to explore the development of a potash mine in the Poplar River Basin north of Scobey. Present estimates indicate that a water supply of 7,000 acre-feet per year would be required for the mine. Farmers Potash Company, a joint venture of Dryer Brothers (a wholly owned subsidiary of Burlington-Northern Inc.) and C.F. Land Corporation (a wholly owned subsidiary of C.F. Industries, Inc.) has applied to the State of Montana for a water right of 7,000 acre-feet per year for this purpose from a point just below the confluence of the East and

Middle Forks of the Poplar River. Groundwater may be developed to supplement the surface water supply.

A development schedule is not yet available, however, it is felt that the mine could be developed by year 1985 if solution mining is technically and economically feasible at the depths at which the formation occurs.

There are extensive lignite coal resources in the eastern portion of the Fort Peck Indian Reservation between the Poplar River and Big Muddy Creek. Three individual strippable reserves have been identified. These are the Fort Kipp, Medicine Lake and Reserve fields containing approximately 331, 58 and 246 million tons of lignite respectively. The overburden is easily strippable with modern mining techniques, however, the extensive mantle of glacial till has discouraged exploration in this area in favor of exploration in unglaciated areas to the south. Data available suggests that lignite resources on the Indian lands are of similar quality and availability as other lignite resources in eastern Montana.

To date, the feasibility of developing the coal reserves on Indian lands has not been investigated, however, it is possible that, because of poor storage potential on Big Muddy Creek, water supply from the Poplar River would be required for development of the coal reserves. Although only three areas of strippable reserves have been quantified to date, other extensive areas of known lignite resources will ultimately be classified as strippable as resource quantification continues. Water demands for the development of the coal resource have not been quantified.

#### Recreation Water Requirements

There is presently no water based recreational development in the Montana portion of the basin. However, there is an active proposal for a recreation lake on Manternach Coulee just south of Scobey. As proposed, this project would provide 2,000 acre-feet of storage with 1,000 acre-feet allocated to flood detention, 500 acre-feet for irrigation, and 500 acre-feet for recreation. No annual water requirement for this project has been determined.

#### IV. SUMMARY OF RESULTS

Identified future water use in the Poplar River Basin in Saskatchewan and Montana is summarized in Table C-3. Note that the quantified future use is not indicative of the total development potential in the basin since it is based upon known resource data. Extensive surveys and resource capability studies were considered beyond the scope of this study.

It is also important to emphasize that the level of investigation in the individual jurisdictions was not consistent primarily because of data availability. In view of this the data presented in Table C-3 must be used with some discretion.

Table C-3: Identified Possible Future Water Requirements in the Poplar River Basin.				
(Acre-Feet)				
Type of Use	Saskatchewan		Montana	
	Use Intentions by 1985	Additional Possible Future Use	Use Intentions by 1985	Additional Possible Future Use
Domestic	120		420	
Irrigation	220		64,900**	2,400
Municipal	110	500	120	
Industrial	8,300	66,000*	7,000	
Wildlife	300			
TOTALS	9,100	66,500	72,400	2,400

\* Development of 66,000 acre-feet in Saskatchewan will require water imported from another basin.

\*\* Development of 64,900 acre-feet in Montana is possible only if no other development of water in the basin takes place or if water is imported from another basin.





